WATER QUALITY IMPACT ASSESSMENT

Single-family Home Encroachments

This document is intended to be a guide for localities to determine whether a project is consistent with the Chesapeake Bay Preservation Area Designation and Management Regulations. Forms may need to be amended to include site-specific conditions or to be consistent with local ordinances and conditions.

Application Date: _____/_____/_____

Applicant Name: _____

Project Type:
New construction on a lot recorded prior to October 1, 1989, or new construction on lot recorded between Ocober 1, 1989 and March 1, 2002, if applicable

NOTE: Regardless of the date on which a lot was recorded, proposed development must be concentrated in the buildable area outside the RPA, if any, and encroachments into the RPA are strictly limited only to the minimum that is required to provide relief and reasonable use of the parcel.

Project Address: _____

Tax Map/Parcel #: _____

Reviewer: _____

REVIEW COMPLETED ON _____/_____/_____

Purpose Statement:

In general, WQIAs are tools that Bay Act localities use to evaluate the environmental impacts of a certain proposed development activity on water quality and to determine specific measures for mitigation of those impacts. A WQIA may also be required, at the discretion of the local government, for development proposed in Resource Management Areas (RMAs). Localities may determine that a WQIA is warranted because of the unique characteristics of the site or intensity of the proposed development.

This form is to be used for the review of single-family home projects, permitted under 9 VAC 10-20-130.4 of the Regulations that propose to encroach into the RPA buffer area. Generally, the purpose of this Water Quality Impact Assessment (WQIA) is to:

1. Identify the impacts of the proposed project on water quality;

2. Ensure that the proposed land disturbance and resulting impervious cover will occur in a manner that will be least disruptive to the natural functions of RPAs;

3. Proposed mitigation will address water quality protection and to maintain the three functions of the buffer area.

Regulatory Authority:

Section 9VAC 10-20-130.1.a (or local code citation) of the Regulations states that a "water quality impact assessment shall be required for any proposed land disturbance" within an RPA, including the 100-foot buffer area.

Section 9 VAC 10-20-130.4 of the Regulations requires local governments make a determination that:

- The proposed encroachment is the minimum necessary to achieve a reasonable buildable area for principal structure and necessary utilities;
- **A vegetated area that will maximize water quality protection, mitigate the effects of the buffer encroachment, and is equal to the area of encroachment is established where practicable;**
- **The encroachment will not extend into the seaward 50 feet of the buffer area;**
- That **disturbance of the RPA** buffer is minimized,
- **Water quality impacts** will be **minimized**,
- **Indigenous vegetation** will be preserved to the maximum extent practicable,Proposed **land disturbance** (limits of construction) will be minimized,
- The project complies with **erosion and sediment control** requirements, if >2,500 of land disturbance, and
- Appropriate **mitigation plantings** are proposed to retard runoff, prevent erosion and filter nonpoint source pollution

Submittal Requirements:

In order to adequately review the project, the applicant must provide three (3) copies of a site plan that includes the following information:

- Scaled drawing including the property boundaries,
- Plan showing proposed encroachment, including any proposed impervious cover in the buffer,
- Plat showing all non-RPA building setback lines and extent of field delineation RPA,
- (perenniality determination and wetland delineation) including the 100-foot buffer area,
- Existing vegetation on site, particularly in the buffer area to include tree types and sizes, understory and shrub list and general location and ground cover description, Photographs are encouraged,
- List and location of specific vegetation to be removed or impacted,
- Limits of land clearing for all construction activities,
- Erosion and sediment control measures to be employed.

Other requirements:

- Written documentation explaining: the justification (need) for the project, including alternative location and design options to minimize proposed encroachment
- Buffer mitigation plan (re-vegetation plan), showing numbers, sizes and types of proposed vegetative plantings to mitigate for the proposed encroachment.

Project Evaluation:

Justification: *Both of these sections may not be required depending on local ordinances*

- Is the subject property a lot recorded prior to October 1,1989? □ Yes □No
  - If yes, is the proposed encroachment the minimum necessary to afford relief based on the lot size, layout and land area (square footage) outside the RPA? □ Yes □No
  - Did the applicant consider design alternatives to avoid the buffer area encroachment? □ Yes □No
  - Did the applicant consider location alternatives to avoid the buffer area encroachment? □ Yes □No
  - Did the applicant investigate requesting front, side or rear yard setbacks variance requests to avoid the buffer area encroachment? □ Yes □No
  - Is the scale of the proposed building similar to adjacent properties? □ Yes □No

- Was the lot platted between October 1, 1989 and March 1, 2002, and does the locality have a provision in their CBPA ordinance for buffer encroachments on these lots if necessary?
  □ Yes □No
  - If yes, have all the above questions been answered affirmatively? □ Yes □No
  - Lot created in conformity with the subdivision ordinance? □ Yes □No
  - Have the conditions/mitigation measures from previous exception been addressed? □ Yes □No
  - Are required BMPs shown? □ Yes □No
  - Have the required BMP maintenance been tracked? □ Yes □No

Minimization of land disturbance:

Proposed area of disturbance: _____ ft.^{2}
Area of lot: _____ft.^{2}

- Is the area of disturbance the minimum necessary for the construction activities? □ Yes □No
- Is there excessive grading seaward of the structure? □ Yes □No

Preservation of indigenous vegetation/ Land Disturbance:

Description of existing woody vegetation within the buffer

_____

_____

Area of woody vegetation proposed to be disturbed for: impervious area _____ft.^{2}
access/ grading area _____ ft.^{2}

Total area of disturbance _____ ft.^{2}

Proposed Mitigation:

1. Did the applicant propose vegetation replacement to mitigate for the proposed encroachment?
   □ Yes □No

   If no, what is the proposed mitigation?

   _____

If yes, then has the proposed mitigation followed the vegetation replacement rates outlined in the Riparian Buffers Guidance Manual? □ Yes □No

If no, then what criteria did the applicant follow in proposing mitigation for the encroachment?
Local guidance? _____
One-to-one replacement?____
Other _____ Specify what the mitigation is_____
_____

2. What is the condition of the existing RPA and/or buffer?
_____
_____
3. Are the native vegetation and natural landscape contours present? □ Yes □No
4. Is the existing buffer functioning to reduce non-point source pollution runoff, reduce erosion and sedimentation and allow for infiltration? □ Yes □No
5. Will additional plantings help the buffer to perform the above functions? □ Yes □No
6. Does the applicant propose to mitigate through the planting of lawn grass? □ Yes □No
7. What types and amount of vegetation are proposed for mitigation?

Trees: Number ____ Size_____ Type(s)

Shrubs: Number Type(s)

Groundcover Type(s):_____

(Use the Buffer Guidance Manual to determine the appropriate mitigation planting for the temporary construction area. Other areas within the buffer may need to be supplemented, due to the existing conditions.)

NOTES: A forested buffer is suggested by the Virginia Department of Forestry to be >320 woody stems/acre, not including herbaceous vegetation.

Vegetation proposed for mitigation must satisfy all buffer functions described in 9 VAC 10-20-130.3, including retarding runoff, preventing erosion and filtering non-point source pollution from runoff. Mitigation species should be native to the local environment and reference sites should consulted where possible.

Erosion and Sediment Control:

Has applicant demonstrated compliance with the local E&S control regulations or indicated that compliance will be required prior to issuance of any land-disturbing permits? □ Yes □No

Consistency Checklist

REQUIRED CONDITION	Y/N	If no, list the conditions that must be addressed for consistency
Is the proposed encroachment the minimum necessary to afford relief for principal structure and necessary utilities?		
Has existing vegetation been preserved to the maximum extent practicable on the site, including within the RPA buffer area?		
Is the proposed land disturbance (limits of construction) been minimized to the extent practicable?		
Have appropriate mitigation plantings been proposed that will provide the required buffer area functions?		
Is the project is consistent with applicable ordinances, such as subdivision, land disturbance, etc.?		
Have all wetlands permits been required prior to construction?		
Will the project will comply with all erosion and sediment control requirements?		

Final Determination

The proposed single family house is
_____CONSISTENT _____ INCONSISTENT with the Bay Act Regulations.

If inconsistent, the following conditions must be addressed prior to issuance of any permits:

_____